

**ABSTRACT OF THE DISCLOSURE**

A power supply system having a power supply including an electric generator and a battery, and a power control unit for controlling electric power supplied from said power supply to an electric load, wherein the power supply system has battery condition sensing means for sensing the operative condition of the battery and load condition sensing means for sensing the operative condition of the electric load, and the power supply system has a function in which the variation of the power supply voltage at the time of the operative requirement of the electric load is estimated based on the condition of said battery and the operative condition of said electric load, and the current of the electric load is limited when the estimated electric power supply voltage is smaller than a predetermined value.